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## THE ROLE AND FEATURES OF INSTITUTIONAL INVESTORS IN PROVIDING OF INNOVATIVE INVESTMENT

*In article is analyzed the structure of innovative investment system in Ukraine. Founded that in Ukraine developed three types of non-bank innovative investors – collective investment institutes (including venture funds), non-state pension funds and insurance companies. To unveil their innovation investment activity was analyzed the current structure of investment assets and its changes. Also in article we outlined the key problems of development of innovative investment in Ukraine and proposed few ways to solve them.*

**Key words:** investment institute, collective investment institute (CII), venture fund, non-state pension fund (NSPF), insurance company.

## РОЛЬ ТА ОСОБЛИВОСТІ ІНСТИТУЦІЙНИХ ІНВЕСТИТОРІВ У ЗАБЕЗПЕЧЕННІ ІННОВАЦІЙНОГО ІНВЕСТИВАННЯ

## РОЛЬ И ОСОБЕННОСТИ ИНСТИТУЦИОНАЛЬНЫХ ИНВЕСТОРОВ В ОБЕСПЕЧЕНИИ ИННОВАЦИОННОГО ИНВЕСТИРОВАНИЯ

Providing of innovative development depends to the volumes and quality of investment resources and it is in the range of the most urgent tasks of the state, which seeks to hold high positions in a highly competitive globalized world market. A significant role in solving of stated problem belongs to financial institutions as one of the founders of the innovation theory J. Schumpeter noted. In particular, he considered the extraction of resources from the sphere of traditional production and their focus on the innovative provision of reproductive processes, the development of entrepreneurship and the stimulation of solvent demands as one of the most important functions of financial institutions [7].

Institutional investors that include financial intermediaries of bank and non-bank type, along with corporate and individual investors, who are the main suppliers of resources in the country's economy, transform and redistribute already accumulated savings into the real sector and complete the redistribution of created value added. In this context, the reasons of the unsatisfactory state of innovation activity in Ukraine should be sought in the area of inefficient investment activity of institutional investors.

Taking into account the stated purpose of institutional investors, attention of scientists to the problems of their functioning and development is natural. Multidimensional issues of institutional investors' work are discussed in the works of foreign and domestic scientists, including W. Sharp, J. Bail, Z. Bodi, O. Vovchak, Y. Mirkin, Y. Kovalenko, V. Levchenko, D. Leonov, O. Mozgovyi, E. Polischuk, N. Sheludko and others. Their achievements have an important theoretical and practical significance for formation of the prerequisites for supporting the innovation sphere in part of financial support.

At the same time, there is not enough reasons to say that many problems of the functioning of institutional investors are solved. The existence of a scientific polemic about the essence of the

concept of «institutional investor», their functions, the possibility of specific tools using for managing them etc., are few of the proofs. These aspects should be added to those related to the current trends on the domestic and global financial markets that are experiencing crisis phenomena or their consequences. Specific challenges for institutional investor's activities are also shaping changes related to the development of cutting-edge instruments, technological innovations and self-service, that influence their dynamics and the ability to carry out investment activities. As a result, this contradictory effects the quantitative and qualitative indicators of institutional investors' activity and the performance of their inherent functions, and therefore requires further scientific research and analysis.

The purpose of the research is to assess the dynamics and structural changes of institutional investors through the prism of their investment functions.

In economic literature, attention is drawn to the lack of a unified classification of financial intermediaries, the main reason of which is the lack of a clear understanding of the essence of institutional investors [3]. In particular, researchers state that all financial intermediaries, including credit institutions, are the institutional investors. According to a different position, only non-bank financial institutions (pension funds, collective investment institutions, insurance companies) are the institutional investors, and banks, credit unions and other financial institutions are not institutional investors. In other words, we have actually two types of investment investors: banking type, including banks, credit unions, other lending institutions and non-banking type, which include collective investment institutions (CIIs), insurance companies and non-state pension funds (NSPFs).

Without determining the legitimacy of any position in this case, our research focuses on non-bank institutional investors with their significant potential abilities to accumulate financial resources of individual and institutional investors in order to convert them into investment capital. Thus, according to A. Danylenko, the market of collective investment as a source of investment capital, has significant prospects for development in Ukraine. In most countries, the volume of financial assets of collective investment institutions is close to GDP or even exceeds it [2]. In Ukraine over the past three years, the total volume of investment capital of collective investment institutions, non-state pension funds and insurance companies does not exceed 18 % of Ukraine's total GDP [11].

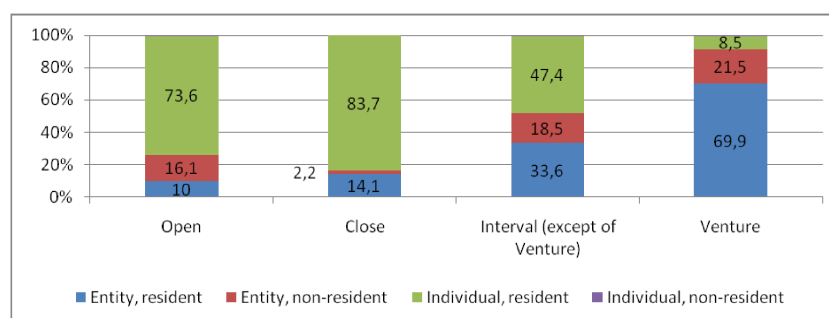
In developed market economies, collective investment institutes, as well as non-state pension funds and insurance companies, are among the most powerful institutional investors that able to convert accumulated savings into investment resources and, at the same time, to receive and generate investment returns. Institutional investors fulfill one of the important tasks of the national investment policy – the creation of a favorable investment climate to convince individual and institutional investors in the financial efficiency of the accumulation of free financial resources in collective investment institutions and to ensure the functioning of an effective mechanism for their transformation into investment [6].

Collective investment institutes are one of the types of institutional investors who, through the placement of their own securities, accumulate own funds of financial resources and turn them into investment capital. The investment capital of the CII is used to purchase securities on the stock and over-the-counter markets, is placed on deposit accounts of banks, is invested in real estate, etc. The activity of the CII promotes the development of the stock market, increases the volume of investment capital, stimulates the innovative development of enterprises[9].

In general, Collective Investment Institute (CII) is a type of investment fund whose main purpose is the accumulation of financial resources of individual and institutional investors for further investing of accumulated funds into financial instruments in order to obtain investment income. This type of investment fund is not an intermediary between the investor and the issuer of financial instruments, since the collective investment institution carries out investment activity on its own behalf, namely, it selects investment offers on own risk and profitability and diversifies selected investment proposals to reduce the level of investment risk for its participants, maximizes the profitability of investment projects to meet obligations to participants and accumulates newly created financial resources for their subsequent transformation into investment capital.

Analyzing qualitative, quantitative and cost indicators of the functioning of collective investment institutions, we found that in Ukraine, on the beginning of 2017, there were 1 130 collective investment institutions with their number reduced on 17 and 58 units from the beginning of 2016 and 2015 years. The total value of assets of collective investment institutions in 2016 decreased by 2.5 %, however, compared with the beginning of 2015, CII assets increased in the value by 11.6 %. At the same time, in the analyzed period there was a decrease in the number of asset management companies (AMC), although the average number of joint investment institutions serviced by one asset management company increased from 5 to 5.5 CII per AMC [11].

However, despite a slight decrease in the value of assets of CII, they remain important investment agents. The majority of investors in collective investment institutions are private individuals – residents of Ukraine and legal entities - residents of Ukraine, which together form up to 95 % of the investment capital during last years as shown on Fig. 1.



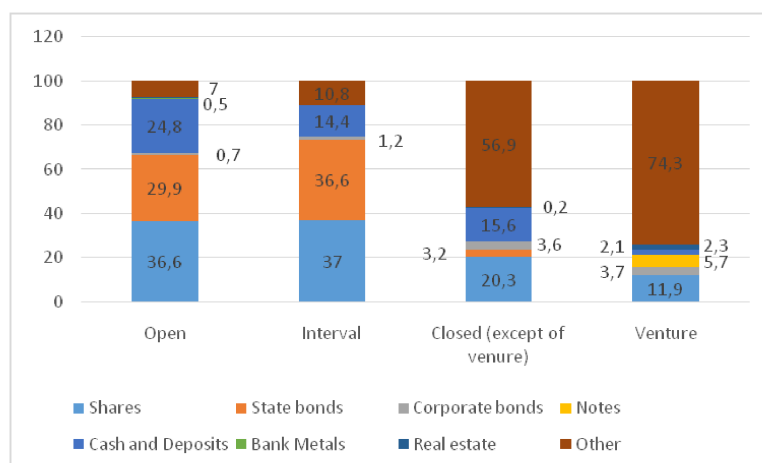
**Fig. 1. Structure of CII investment capital by the type of investors, on 01.01.2017**

Source: [11].

Total amount of investment capital in CII that belongs to residents is 78.5 % and to non-residents equally 21.5 %. Year-by-year dynamics shows that volume of investment capital in CII that arises from resident entities is lowering for last 5 years and volume of investment capital from other types of investors is growing. In total on the beginning of 2017 resident investors formed 78.5 % of all investment capital of CII and 76,3 % of which is formed by individual investors [11].

Analysis of the investing directions in CII, we found that on the beginning of 2017 investment in shares ranges from 20.3 % to 37 % of the total investment value depending on the type of CII, which is 56.3 % of the value of the consolidated securities portfolio held by CII. The second place is taken by government bonds used by CII as a tool for providing risk-free income and deposits in banking institutions (Fig. 2). The structure of the venture CII assets differs significantly from the

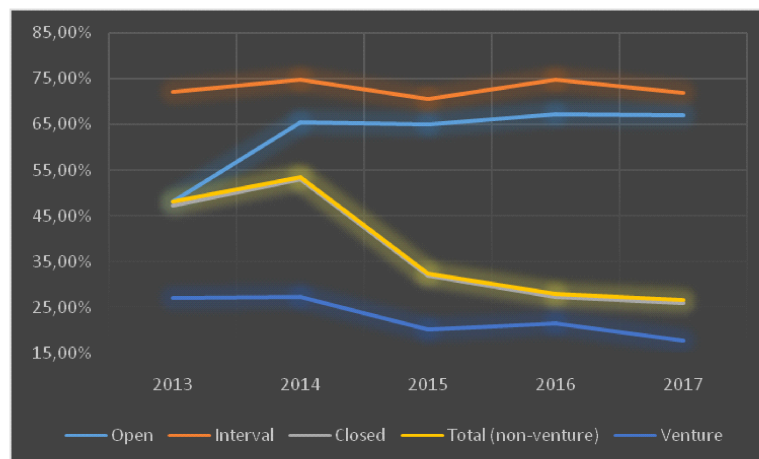
structure of other CII assets because of the nature of its activity, so the main assets of venture CII are property instruments that are different from shares.



**Fig. 2. Structure of CII assets, on the 01.01.2017**

Source: [11].

But if we take a look on the dynamics of changes in the structure of CII assets (Fig. 3), we'll see that only open CII has a strong visible growth in volume of securities in the structure of invested assets, while other types of CII show the downward trend. If we compare these lines with the minimum and average level of securities profitability on Ukrainian stock market, same dynamics will appear. So, now it is more effective and riskless to deposit free financial resources than to invest the into any securities.



**Fig. 3. Percentage of securities in investment structure of different types of CII from 2013 to 2017**

Source: [12].

The average annual rate of profitability of CII in Ukraine for the period of 2013–2017 is around 14.7 % for all asset groups, while, for certain types of securities, annual income reached 39.7 % [11].

A special form of CII is venture capital investment funds. Venture capital investment is one of the sectors of the financial market that has been developing extremely fast over the past 40 years. In 1980, the volume of venture investment in the US did not exceed 610 million US dollars according to PricewaterhouseCoopers Moneytree and till 1992, the volume of venture capital increased to \$ 2.3 billion. After reaching its peak of US \$ 100 billion in the first half of the 2000s as part of the growth of «dot.com» bubbles, the volume of venture financing in 2010 dropped to \$ 30 billion that is one of the sharpest drops in investors' interest in venture investment. Since 2010, there has been a slight increase and the volume of venture capital operations so till 2015 venture investment doubled its volume and at the end of 2017 the registered volume of venture investment reached 79 billion US dollars [5]. According to Prequin, since 2000, the world annually creates 200 venture capital funds that attract up to \$50 billion from institutional investors [4]. Although the United States still retains its leading position in the creation and attraction of venture capital, today Europe and Asia together account for half of all newly created venture capital investments [1].

Venture business is a type of financial activity focused on implementing high-risk investments in scientific and technologic projects in order to profit from innovative inventions, know-hows, projects or technologies developed by them. Accordingly, the venture fund is a legal entity whose activity consists in the accumulation of investment resources of individual and institutional investors with their subsequent investment in innovative high-risk projects for the obtaining investment income.

The main areas of venture investment in the USA are software development (35 % of total venture investment), biotechnology (18 %), consumer goods and services (11.5 %), energy (6 %), medicine (5.5 %), media (5 %), financial sector (5 %) and others (14 %) [5]. In the EU, the distribution of venture investment is somewhat different. Thus, 27.3 % of the total amount of venture investments is invested in software development, 15.4 % in medicine, 13.8 % in the financial sector, 11.8 % in online trade, 10.1 % in cybersecurity. The most innovative areas in the emerging industries (future tech) that received the most venture funding are Internet of things (550 million euros), artificial intelligence (609 million euros), space programs (238 million euros), VR (192 million euros). The volume of venture investment into innovation projects in the EU grew from EUR 2 billion in 2012 to EUR 7.87 billion in 2016, with the volume of financing of promising innovative products in the field of future tech for the indicated period increased 10 times (from 225 million euros to 2.05 billion euros) [13].

The directions of venture investment in Ukraine significantly differs from world trends because the main areas of venture investment in Ukraine are agriculture, food industry, construction materials production, retail trade, and the production of consumer goods. The software development and the future techs in Ukraine are at the end of the list of venture investment because domestic start-up companies do not have sufficient skilled personnel and appropriate logistics to carry out innovative developments [8]. Although recent investment trends in the industry are positive, the lack of an active stock market and the complexity of doing business force innovative companies to search the venture investment outside Ukraine with the transfer of all assets to the country of venture investment origins.

According to the average level of profitability and the structure of assets of CII, we can conclude that today CII in Ukraine are pursuing strategies for minimizing risks, while aggressive investment policies in the conditions of economic instability and the real stock market lead to the losses related with excessive investment risk. Therefore, investment intoperspective innovative projects through non-venture CII in Ukraine is minimizing. At the same time, CII are actively using government bonds but we can not argue about any social orientation of such investments.

On the other hand, CII act as the link that provides the liquidity of private companies securities that are rotated on the stock market and ensures that such companies receive additional financial resources for innovation. Therefore, with the aim to obtain passive investment income (ie, investment income without participation in the company's activity), CII act as financial drivers for innovative development of companies.

Non-state pension funds (NSPFs) are the next type of financial companies that can accumulate resources for investment. Foreign experience shows that the activity of NSPFs contributes to the growth of investment in the real sector of the economy through the use of private pension assets that are turned into investment capital, which is an essential condition for the active development of the Ukrainian economy. However, for the economic and social efficiency of newly created investment capital use, it is necessary to understand the essence and capabilities of NSPFs as participants on the investment market.

In general, a non-state pension fund is a non-profit financial institution that collects pension savings for its members in order to preserve and increase their value on a non-profit basis.

The aim of the NSPFs is in the accumulation of retirement financial assets of the members of this pension fund and in the subsequent preservation of their value and purchasing power through investment activity. Income from investment activity must be used to compensate the inflationary effects and to increase the aggregate volume of personal pension assets of NSPFs participants depending on the size of their personal contribution.

Private pension assets accumulated by NSPFs may be used only for investment activities of the NSPF or to fulfill the obligations of the NSPF to their members in terms of repayment of their retirement assets. Any other purpose of using NSPFs assets is prohibited.

At the same time, for the additional protection of private pension assets of NSPFs participants, the investment opportunities of the capital formed from the pension assets are strictly regulated by legislation in terms of their diversification. In addition, NSPFs are extremely attractive and promising participants of the investment market at the same time because one of the key advantages of the NSPF is the taxation system of these funds. According to the Ukrainian legislation, the NSPF has to tax the pension assets of its members only at the time of pension payments, which allows them to invest capital formed from personal pension assets without paying income taxes in the end of each investment cycle.

Analysis of the development dynamics of the NSPF sector shows that the peak time of the creation of non-state pension funds in Ukraine has already expired and the stabilization of the NSPF sector is taking place. Main proof is that after the rapid increase of the number of NSPFs and of their assets value from 2005, in 2012 there was a tendency towards stabilization of the sector and reduction of the NPFs amount to an optimal level for current economic conditions. Thus, at the beginning of 2017 there were 39 NSPFs operating in Ukraine, the number of which decreased by 5 units compared to the previous year, but the number of NSPF assets grew by 11.7 %, indicating a qualitative development of the NSPF sector in Ukraine [11].

Analyzing the investment activity of non-state pension funds, we note the reduction of the share of securities in the overall structure of NSPF assets by 5 %, with securities being replaced with cash, deposits and real estate, which share during the last year doubled from 2.1 to 4 % of the total value of NSPF assets.

The securities portfolio has also significantly changes in recent years. Thus, the value of shares and bonds of enterprises in the structure of securities of all NSPF since 2014 decreased by more than 10 times – from 8 to 0.5 % in shares and 5 times – from 14.5 to 3.5 % in bonds [10]. At the same time, in order to maintain a high level of investment activity, NSPFs performed an additional purchase of government bonds, increasing their value by almost three times – from 14.4 to 31.4 % of all assets.

The third financial investment institution of non-bank type in Ukraine is insurance companies. According to the nature of their activities, insurance companies perform accumulation of insurance payments that can be transformed into investment capital in order to preserve their value under the conditions of inflationary risks and multiply if the insurance company conducts a successful aggressive investment policy. As a result, a successful investment policy leads to an increase of financial stability of an insurance company and to increase in the quality of its services. Insurance company as investment institution works on its own risk and all investment income will be distributed inside the company, not among the members of insurance company.

On the beginning of 2017, there were 343 insurance companies operating in Ukraine, of which 298 «non-life» companies and 45 «life» companies. Analyzed dynamics shows steady decline in the number of insurance companies in the Ukrainian market (by 16 % since 2014) but volume of investment resources of insurance companies during that period raised by 32 %. Main trends show that small insurance companies tend to perform M&A with large ones.

Investment activity of insurance companies can be carried out in two ways: the insurance company on its own carries out investment activity or transfers its insurance assets to the asset management company. On the beginning of 2017, only 7 out of 343 insurance companies used the services of professional investment management companies, although the growth trend is positive, as at the beginning of 2016, there were only 5 such insurance companies. This reflects the desire of most insurance companies to maintain significant autonomy in managing their own investment flows and increase the level of investment profitability due to the lack of costs for the asset management company's services.

At the same time, when conducting investment activity, insurance companies have significant restrictions on the use of investment instruments that are similar to non-state pension funds. These restrictions are established by government due to the requirements of the sufficient level of diversification of investment assets and of the acceptable level of investment risk. In addition, these restrictions plays vital role in fighting tax avoidance of insurance companies through the investment instruments. At the same time, the legislation does not set the minimum level of use of specific financial instruments, leaving enough scope for optimizing the investment portfolio of insurance companies.

Analysis of the general structure of the assets of the insurance companies shows that the total investments in securities on the beginning of 2017 amounted to 13 746.4 million UAH, representing 40.7 % of the total volume of investment assets of insurance companies. Shares are the main investment instrument in the securities portfolio and form 64.5 % of its value. However, since 2014, there has been a steady decline in the share of shares in the total portfolio of securities, and during



2016 it decreased on 3 303.7 million UAH or 13.4 % in the total portfolio of securities. Instead of shares insurance companies are buy government bonds and during 2016 their volume in the securities portfolio has doubled (from 2.6 to 4.3 billion UAH).

The feature of insurance companies as investors in comparison with other financial institutions is that the Cabinet of Ministers of Ukraine have approved the priority sectors of reserves investing that have the priority in the investment activity of insurance companies. These priority sectors include the development and implementation of high-tech equipment and resource and energy-saving technologies; the development of tourism infrastructure; the mining of minerals; the processing of waste from mining and metallurgical production; the housing construction; the development of transport infrastructure, including construction and reconstruction of highways; the development of communication and telecommunications sector; the development of the mortgage lending market through the acquisition of securities issued by the State Mortgage Institution.

Accordingly, on the beginning of 2017, insurance companies had invested 30.2 million UAH into the stated priority sectors, representing 0.09 % of the total volume of investment assets of insurance companies. However, this volume of investment is insufficient for investment financing of innovation projects, since 95 % of all financing of priority sectors is directed to the tourism sector.

Considering the general scheme of investment financing of innovation projects, we can establish a few dependencies. First, innovations can be carried out in the form of new developments or through the introduction of the latest technologies. Second, innovations in any form can be implemented as a start-up company that simultaneously develops and provides access to the latest technologies to other companies and as existing companies that have research departments that carry out research in those areas, which are relevant to their company. Based on the above, for each combination of factors of the first and second groups there is a separate type of investor, which provides most effective conditions for cooperation.

Therefore, if start-up companies are developing innovative products and technologies, venture capital companies that provide financial support on the one hand and skilled administrative personnel on the other hand are able to minimize their failure risk due to factors that are not related directly to the development of an innovative product or technology. When the start-up company with venture investment reaches the level of an efficient company with innovative technologies and mechanisms for their implementation, the venture capital outflow and the company transforms into a joint stock company whose securities may be interesting to other innovative investors. Or this company can perform the M&A with the group of companies, who are interested in using the new technology or product.

If a startup company is created to develop the new technology for the corporation but for some reasons it is not part of its structure, the innovative investment is being made through the mechanisms of corporate venture funds or closed CII and the most preferable result of the development of this company is the M&A with the parent corporation.

In another variant of the combination of first and second group's factors the investment of innovation research is performed by the issue of target securities and derivatives. As innovative investors in this case, depending on the level of reliability of the issuer, may act non-venture CII of open and interval type and both NSPFs and insurance companies within the legal restrictions on their investment activity. In this case, the type of innovation (the development of new technologies

or equipment renovation for the use of advanced technologies) defines, basically, only the level of risk that establishes the level of securities profitability.

As follows from the research, giving a general characteristic to institutional investors in terms of their innovation activity, venture funds can be characterized as innovative investors of the first-wave who receive a high level of returns under high investment risk. Same time non-venture capital CIIIs, NSPFs and insurance companies are innovative investors of the second wave and they receive a moderate level of investment income with average and low risk level.

Also we should note that due to the instability of the Ukrainian market of innovation investment, we have the decline in investors' interest in innovative investment. This is the result of, firstly, the transition from investing in companies' securities to investing in government bonds; secondly, the presence of significant distortions in the directions of innovation investment. In Ukraine as main investment area predominates the agro-industrial complex in contrast to the developed countries of the world, in which the priority belongs to the innovative investment in the software development and future techs. In addition, the aforementioned outline the ways in which the development of institutional investment should take place in order to stimulate innovation investment as a key precondition for the formation of an innovative model of the Ukrainian economy.

## SOURCES

1. Aizenman, J., Kendall, J. (2008). The internationalization of venture capital and private equity *Journal of Applied Corporate Finance* 20, P. 88–97.
2. Danylenko . . et al. (2008). Mechanisms of money and stock markets and their influence on the development of economy of Ukraine. *Feniks*, 2008. – 442 p.
3. Dyba, M.I., Yurkevych, O.M. et al (2013) Financial support of innovative development of Ukraine *KNEU Publishing*. – Kyiv, 2013. – 425 p.
4. Kaplan, S., Lerner, J. (2010). It ain't broke: the past, present, and future of venture capital. *Journal of Applied Corporate Finance* 22, 36–47.
5. PwC MoneyTree Report Q4 2017. US Venture Investment [ ]. – : Retrieved from [https://www.pwc.com/us/en/moneytree-report/assets/MoneyTree\\_Report\\_Q4\\_2017\\_FINAL\\_1\\_10\\_18.pdf](https://www.pwc.com/us/en/moneytree-report/assets/MoneyTree_Report_Q4_2017_FINAL_1_10_18.pdf)
6. Reverchuk, S.K., Vovchak, O.D., Kubiv, S. . (2004). Institutional investology. *Atika*, 2004. – 208 p.
7. Shumpeter, J. (1982). *Theory of economic development* Printing house «Progress», Moscow, 1982. – 455 p.
8. Tovmasian, V. (2015). Problems of venture investment development in Ukraine. *Economy and State*. – 2015. – 2. – P. 152–156.
9. UAIB (2010). Analytic over view of common investment market in Q2 2010. *Ukrainian Association of Investment Business* [ ]. – : [http://www.uaib.com.ua/analituaib/analytics/kvartal\\_anal/131031.html](http://www.uaib.com.ua/analituaib/analytics/kvartal_anal/131031.html)
10. UAIB (2014). Analytic over view of common investment market in Q4 2014. *Ukrainian Association of Investment Business* [ ]. – : [http://www.uaib.com.ua/files/articles/2245/55/Q4%202014%20%20Full%202014\\_final.pdf](http://www.uaib.com.ua/files/articles/2245/55/Q4%202014%20%20Full%202014_final.pdf)

11. UAIB (2017a). Analytic over view of common investment marketin Q4 2016. Ukrainian Association of Investment Business [ ]. – : [http://www.uaib.com.ua/files/articles/2561/48/Q4%202016%20&%20Full%202016\\_final.pdf](http://www.uaib.com.ua/files/articles/2561/48/Q4%202016%20&%20Full%202016_final.pdf)

12. UAIB (2017b). Analytic over view of common invest ment marketin Q3 2017. Ukrainian Association of Investment Business [ ]. – : [http://www.uaib.com.ua/files/articles/2561/48/Q3%202017%20&%20Full%202017\\_Q3.pdf](http://www.uaib.com.ua/files/articles/2561/48/Q3%202017%20&%20Full%202017_Q3.pdf)

13. Yoram Wijngaarde. Dealroom 2016 European venture capital report [ ]. – : <https://www.slideshare.net/yoramw/dealroom-2016-european-venture-capital-report>